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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,191	02/12/2002	John A. Szymbor	EH-10586	4463
30188	7590	08/20/2007		
PRATT & WHITNEY 400 MAIN STREET MAIL STOP: 132-13 EAST HARTFORD, CT 06108			EXAMINER PICKARD, ALISON K	
			ART UNIT 3673	PAPER NUMBER
			MAIL DATE 08/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/074,191	<b>Applicant(s)</b> SZYMBOR ET AL.	
	<b>Examiner</b> Alison K. Pickard	<b>Art Unit</b> 3673	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12,15-20,24-28,30 and 44-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12,15-20,24-28,30 and 44-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 24-28, 30, and 45-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's Admitted Prior Art (Figs. 1-2, pages 6 and 7).

Applicant discloses a known method of making a multi-stage brush seal comprising the steps of providing discrete plates and bristle arrangements within a fixture. For example, plate 55 of unit 61 is discrete from plate 55 of unit 62, etc. The plates and bristles are stacked in the fixture and then welded together to create the multi-stage seal, which is then removed from the fixture. One of the plates 51 is a windage cover.

3. Claims 44, 50, 52 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application 0357536 (EP '536).

EP '536 discloses a method of making a brush seal comprising the step of providing a fixture having a base 24 with plural guides 28. The fixture also has a shuttle 12 with a side wall and annular shoulder 14. Plural bristle tufts 16 are arranged in a skewed fashion between the guides and spread around the fixture. The bristles are then welded together. A cover 18 is provided and tightened to spread the bristles.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12, 15-20, 44 and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howe '197 in view of EP '536.

Howe discloses a method of making bristle arrangements and brush seals comprising the steps of forming a plurality of bristle tufts having a bead 10 at one end. Howe discloses that the plural tufts can then be placed in a fixture and then further joined to plates. However, Howe does not disclose the features of the fixture as required by the claims. EP '536 teaches a method of making a brush seal, which requires fewer steps than previous methods. EP' 536 teaches the use of a fixture having a shuttle 12 with a sidewall and annular shoulder 14 and a base with plural guides 28. Bristle tufts are arranged between the guides in a skewed fashion. Ends of the tufts project beyond the base and are placed against the shoulder 14. Plates are arranged on either side of the bristles. Then the bristles and plates are welded together along the exposed portions at 14 and removed from the fixture. EP '536 teaches this method requires fewer steps and ensures the bristles are properly positioned and secure to the plates. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the fixture and steps of EP '536 to form the bristle tufts of Howe into a brush seal in fewer steps and so as to ensure the bristles are properly positioned.

6. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of EP '536.

As stated above, Applicant discloses a known method of making a multi-stage brush seal. However, Applicant does not appear to disclose the fixture used to create each individual brush seal (i.e. 59 or 61). EP '536 teaches a fixture used to make a brush seal comprising a base 24 and guides 28. The fixture ensures proper placement of the bristles and securement to the plates in fewer steps. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the fixture of EP '536 to create the brush seals 59 or 61 in the prior art before they are joined as a multi-stage unit.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3673


however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 571-272-7062.

The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Alison K. Pickard  
Primary Examiner  
Art Unit 3673

AP